Dear Dick.

Sorry it's been so long since I've written you. Have been quite busy with school, and there really hasn't been anything urgent to communicate between us.

I have your recent paper at hand, copied and ready to send on to Gary. I've read it once, and will go over it again now, making comments as I do. My initial reaction was that your arguments are not nearly so good as they could be, and that your documentation is deficient. The numbers I will use refer to your own paragraph numbers.

- 1 You say that JFK was hit from a location forward "and to his right." I would revise this. We cannot say for sure whether the location was dead shead of him or even to his left.
- 3 Unless the reader is familiar with ballistics, he will not understand why the presence of minute fragments necessitates a bursting bullet. I forget if this is explained later, however.

4 - Perhaps a bit of Hoch is rubbing off on me, but I object to your use of the word "anvariably" in terms of where the fragments will come to rest. Consider the case of brain matter, which expands so greatly when penetrated by a bullet.

I have one reference which contradicts your assertion. It is from a hunting book called "The American Rifle." In speaking of an "explosive bullet", 87 grains, .2500 caliber, 3,000 f.p.s., the author refers to a case of his; "It struck a buck in the ribs at about 75 yards, and the semi-liquid lead of the core filled the heart and lungs with pinhead-size flakes of lead that flew in every direction." Lung tissue, like brain, is very loose and delicate.

- 5 You fail to mention the very extensive fracturing of the skull, beyond the main defect and into the base and left side. This is quite important and highly indicative of a high velocity round. It can aid your argument.
- 8 I think this is unnecessary, at least in its implications. What do you mean by "appears to have been created"? Naturally? Surgically? I think the fault is mostly in the autopsy docs false description of the position of this hole. Also, a flap of skin may cause what you see in Z.
- 27 You mistaken imply that the group of relatively large fragments contained pieces "less than 1 mm. in size." I believe the Panel implies that the relatively larger ones were greater than 1 mm. (see p. 10, P.R.)
- 31 I would not immediately assert that the fragments "conclusively establish" until I had gone into the appropriate explanations.
- 33 You say burst again without explanation. To the person unfamiliar with ballistics, this is incomprehensible. Why must it burst? Why can't it just break apart? You must

explain the whole concept of "bursting," especially in terms of high velocity.

34 & 34-A - I think it is significant that Mr. Harrison is speaking in terms of spherical shotgun pellets. In your footnote, you say that shape is irrelevant by virtue of size. I don't see how this is possible. Irregular shape is quite different than spherical, and I'm sure each would exhibit generally different patterns of penetration, since I would think the spherical projectile could travel greater distances on less velocity.

The main point is that stated in the first sentence of 34A. Before I would use the rest as applied to minute irregular bullet fragments, I would check with someone in a position to know, and who could be cited. If you wish to use yourself, then you must put forth your qualifications as someone well informed and experienced in this field. I would suggest at least an experienced hunter or pathologist.

- 36 This is a start. However, I do not think the quote from Braverman adequately verifies the distinctions between larger fragments going further and dustlike ones going almost nowhere at all. Likewise, it does not explain how Braverman assumes the portion was "reduced" to dust, and does not address the specific question of penetration of brain tissue.
- 37 last sentence, "they do not appear elsewhere without also appearing there." This seems to contradict your whole argument, i.e., that this dust cannot appear anywhere else but where it was created or where the bullet burst.
- 47 The first sentence in this graph is a good one. However, it brings up an issue which you do not address, and which your paper cannot adequately explain in its current state, largely due to your failure to explain bursting. How is the reader to know the bullet which burst in the front of the head did not get there from the rear? How is he to know that a bullet did not enter through the rear, pass forward toward the front and somehow burst in the right-front region? You must explain why a bullet cannot burst in the middle of solid brain tissue, and rule out factors which might explain it, such as pressure inside the bullet, etc.
- 53 to 57 Here you get into the meat of my previous criticism. However, I think the tests you propose are not very good. At least, you must also fire 6.5mm jacketed bullets, so that it cannot be argued that something occurs in the separation of jacket and core which could account for the fragments as your test of only the lead could not.

As for your latest letter, I would be interested in anything

Wecht has to say on these matters, and would like to know how he is "wrong." I will try to contact Fillinger, possibly request something in writing from him.

As for publication, I see no reason why this should not go into print, with revision. I don't think it will affect its presentation in court, if that becomes necessary. Likewise, I hardly anticipate any reaction by the government or the press. If Sprague's irresponsible gibberish got the amount of coverage and total absence of gov't response it did, yours could evoke only less. In the very least, it would appear responsible, and thus would have to be avoided.

Admittedly, I initially feared publication because I foresaw the sticky matter of our work overhapping. However, the work in the monograph is definately your own, and touches not in the least on the areas of the head shot on which I have concentrated.

Your correspondance with Morgan is quite good, and re-

However, in your second letter, I believe there is a fault in your frontal and superior view diagrams. The area in which you put the concentration of finely divided fragments is one which doubtlessly was blown away. This necessarily implies that the fragments were located closer to the midline than you represent, for they had to be somewhere where there was still tissue, and there certainly was none where you illustrate it.

There really isn't much more to say. I'm home now for a few weeks break between semesters. My first semester at college was a good one. I enjoyed it immensely and wound up with a satisfying average, probably 3.3 or 3.4. I'll be visiting Harold sometime during the break. Right now, I'm working to complete my book, with intro and conclusions to be written.

Many thanks for the blow-up of the shirt collar. That plus the slide work I've requested will surely put you out so I'm enclosing a check to reimburse you.

Have a good holiday.

Best,